

# Application to Participate in the Evaluation of Latent Fingerprint Technologies Test (ELFT07)

## – Phases I & II

### 1. Who Should Participate

- 1.1. The objectives of this series of tests (ELFT07) are described in the *Concept of Operations (CONOPS)* document found on the NIST website.<sup>1</sup>
- 1.2. Developers of latent fingerprint matcher software systems are invited to participate in ELFT07.
- 1.3. In addition, companies, research organizations, or universities that have developed mature prototypes or research latent fingerprint matchers are invited to participate.
- 1.4. The latent fingerprint matching software need not be “operational,” nor a production system, nor commercially available. However, the system must, at a minimum, be a stable implementation capable of being “wrapped” (formatted) in the API specification that *National Institute of Standards and Technology (NIST)* has published<sup>2</sup> for this evaluation.
- 1.5. Anonymous participation will not be permitted. This means that signatories to this Agreement acknowledge that they understand that the results (see Sections 6 and 7) of the evaluation of the software will be published with attribution to their organization.

### 2. How to Participate

- 2.1. In order to request participation in ELFT07, potential participants must fill out this Agreement, *Application to Participate in ELFT07*, identifying the Responsible Party and the Point of Contact, print and sign the form, and send to the location designated below.
  - 2.1.1. The Responsible Party is an individual with the authority to commit the organization to the terms in this document.
  - 2.1.2. The Point of Contact is an individual with detailed knowledge of the system applying for participation.
- 2.2. Upon receipt of the signed form by NIST, the organization will be classified as a “Participant”. NIST must receive the form by the due date described in the ELFT07 Calendar, as posted on the ELFT07 website<sup>3</sup>. Registered Participants should download the small Validation Dataset available on the website. Prior to submission of their *Software Development Kit (SDK)* the Participant needs to verify that a) their software executes on the validation data, and b) produces a candidate list in the desired format.

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<sup>1</sup> The CONOPS is available at [http://fingerprint.nist.gov/latent/elft07/elft07\\_concept.pdf](http://fingerprint.nist.gov/latent/elft07/elft07_concept.pdf)

<sup>2</sup> The API is available at [http://fingerprint.nist.gov/latent/elft07/elft07\\_api.pdf](http://fingerprint.nist.gov/latent/elft07/elft07_api.pdf)

<sup>3</sup> The Latent Evaluation homepage is at <http://fingerprint.nist.gov/latent/elft07/>

The output of the validation data must be submitted to NIST along with the SDK. (NIST will supply the correct match to each search in the Validation Data. However, the submitted validation candidate list need not have the correct match appear on the candidate list.)

2.3. After the Participant has executed his software on the Validation Data, the Participants should send the software (SDK) together with the validation output to NIST. Software can be sent by email to [latent@nist.gov](mailto:latent@nist.gov), or on CD to:

Evaluation of Latent Fingerprint Technologies Test (ELFT07) Liaison  
National Institute of Standards and Technology  
Information Access Division (894)  
100 Bureau Drive, Stop 8940  
Gaithersburg, MD 20899-8940

2.4. Participants shall submit at least one SDK. They may elect to submit a second SDK also. These will be referred to as the primary and secondary SDKs. The Participant must specify which one is the primary. NIST will execute the primary first, then the secondary (as time allows). The primary SDK should operate in a slow-but-accurate mode. The secondary SDK should operate in a faster-but-less-accurate way. More specific timing requirements for the “slow” and “fast” versions are found in the CONOPS. Organizations shall fill out one copy of this form (*Application to Participate in ELFT07*) regardless of the number of SDKs submitted.

2.5. Software submitted must be compliant with the ELFT07 API Specification, as posted on the ELFT07 website at [http://fingerprint.nist.gov/latent/ELFT07/elft07\\_api.pdf](http://fingerprint.nist.gov/latent/ELFT07/elft07_api.pdf)

2.6. Upon receipt of the SDK and validation output, NIST will attempt to reproduce the output by executing the SDK on the validation data, using a NIST computer. In the event of disagreement in the output, or other difficulties, the Participant will be notified.

2.7. In the event software is found to be non-functional or non-compliant with the ELFT07 API, or where the Validation Dataset results cannot be replicated by NIST, Participants will be notified with a detailed description of the problem(s) and given a reasonable opportunity to resubmit (as time allows) according to the discretion of the ELFT07 Liaison.

### **3. Points of Contact**

3.1. The ELFT07 Liaison is the government point of contact for ELFT07.

3.2. All correspondence should be directed to [latent@nist.gov](mailto:latent@nist.gov), which will be received by the ELFT07 Liaison and other ELFT07 personnel.

3.3. These correspondences may be posted on the *FAQ (Frequently Asked Questions)* area of the ELFT07 website at the discretion of the ELFT07 Liaison. The identity of those persons or organizations whose correspondences lead to FAQ postings will not be made public in the FAQ.

## 4. Access to ELFT07 Validation Data

4.1. The ELFT07 Validation Data is supplied to Participants to assist in preparing for ELFT07.

4.2. The fingerprints in the ELFT07 Validation Data are representative of the ELFT07 Test Data **only** in format. Image quality, collection device and other characteristics may vary between the Validation and Test Datasets.

## 5. Access to ELFT07 Test Data

5.1 The ELFT07 Test Datasets are protected under the Privacy Act (5 U.S.C. 552a), and will be treated as ***Sensitive but Unclassified*** and/or ***Law Enforcement Sensitive***.

5.2 ELFT07 Participants will have no access to ELFT07 Test Data, either before, during or after the test.

## 6. Reporting of Phase I Results

6.1. NIST Considers Phase I to be a “Proof of Concept Test”. This means that the primary objective of Phase I will be to demonstrate the submitted SDK executes on the Phase I data to completion and produces a “meaningful” output. A “meaningful” output is basically an output in the correct format.

6.2 The results of Phase I will be discussed with the Participant on a “one-on-one” basis, but will not be published or submitted to other government agencies. The number, but not the names, of participants who attempted and completed Phase I will be disclosed.

6.3 Participants will have the option to withdraw anonymously following participation in Phase I.

## 7. Reporting of Phase II Results

7.1 Participants who elect to continue to Phase II will be required to resubmit their SDKs. These need not be identical to those in Phase I.

7.2 For Participants electing to participate in Phase II testing, the Government will combine all results into a Final Report. The *Evaluation of Latent Fingerprint Technologies Test, Phase II Final Report* will contain, at a minimum, descriptive information concerning ELFT07, descriptions of each experiment, and aggregate test results. NIST will use DET performance metrics as the primary indicators of one-to-many identification search accuracy. This involves plotting false rejection versus false acceptance rates for all threshold values. NIST will also report enrollment and search timing information. NIST may compute and report other aggregate statistics.

7.3 Participants will have an opportunity to review and comment on the Final Report. Participants’ comments will be either incorporated into the main body of the report (if it is decided NIST reported in error) or published as an addendum. Comments will be attributed to the participant.

7.4. After the release of the Phase II Final Report, Participants may decide to use the results for their own purposes. Such results shall be accompanied by the following phrase: “Results shown from the Evaluation of Latent Fingerprint Technologies Test (ELFT07) do not constitute endorsement of any particular system by the U. S.

Government.” Such results shall also be accompanied by the Internet address (URL) of the ELFT07 Final Report on the ELFT07 website.

7.5. Any data obtained during ELFT07 (excepting the SDK itself), as well as any documentation required by the Government from the participants, becomes the property of the Government. Participants will not possess a proprietary interest in the data and/or submitted documentation.

7.6. With the signing of this form, Participants attest that they will not file any ELFT07-related claim against ELFT07 Sponsors, Supporters, staff, contractors, or agency of the U.S. Government, or otherwise seek compensation for any equipment, materials, supplies, information, travel, labor and/or other participant provided services.

7.7. The Government is not bound or obligated to follow any recommendations that may be submitted by the Participant. The United States Government, or any individual agency, is not bound, nor is it obligated, in any way to give any special consideration to ELFT07 Participants on future contracts.

7.8. With the signing of this form, Participants realize that any test details and/or modifications that are provided in the ELFT07 website supersede the information on this form.

7.9. With the signing of this form, Participants realize that they can withdraw from the ELFT07 at any time prior to the start of Phase II, without their participation and withdrawal being documented in the ELFT07 Final Report.

7.10. NIST will use the Participants SDK software only for the agreed-upon testing, and in the event errors are subsequently found, to rerun prior tests and resolve those errors.

7.11. NIST agrees not to use the Participants software for purposes other than indicated above, without express permission by the Participant.

7.12. Please mail the completed and signed form to:

Via Mail:

Evaluation of Latent Fingerprint Technologies Test (ELFT07) Liaison  
National Institute of Standards and Technology  
Information Access Division (894)  
100 Bureau Drive, Stop 8940  
Gaithersburg, MD 20899-8940

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## Request to Participate

|                                    |
|------------------------------------|
| <b>Company / Organization Name</b> |
|------------------------------------|

Responsible Party

|                               |                   |           |                      |                 |
|-------------------------------|-------------------|-----------|----------------------|-----------------|
| <b>Title</b>                  | <b>First Name</b> | <b>MI</b> | <b>Last Name</b>     | <b>Suffix</b>   |
| <b>Street/Mailing Address</b> |                   |           |                      |                 |
| <b>City</b>                   |                   |           | <b>State</b>         | <b>Zip Code</b> |
| <b>Phone Number</b>           | <b>Fax Number</b> |           | <b>Email Address</b> |                 |

Point of Contact: Check if same as Responsible Party above ☐

|                               |                   |           |                      |                 |
|-------------------------------|-------------------|-----------|----------------------|-----------------|
| <b>Title</b>                  | <b>First Name</b> | <b>MI</b> | <b>Last Name</b>     | <b>Suffix</b>   |
| <b>Street/Mailing Address</b> |                   |           |                      |                 |
| <b>City</b>                   |                   |           | <b>State</b>         | <b>Zip Code</b> |
| <b>Phone Number</b>           | <b>Fax Number</b> |           | <b>Email Address</b> |                 |

With my signature, I hereby request consideration as a Participant in the Evaluation of Latent Fingerprint Technologies Test (ELFT07), and I am authorizing my company or organization to participate in ELFT07 according to the rules and limitations listed in this document.

With my signature, I also state that I have the authority to accept the terms stated in this document

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SIGNATURE OF RESPONSIBLE PARTY

DATE

